# Express Mail Ro. EV 6.33.51311/45

#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

### (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 29 September 2005 (29.09.2005)

**PCT** 

## (10) International Publication Number WO 2005/090560 A1

- (51) International Patent Classification<sup>7</sup>: C12N 9/16, 15/55, 15/63, 5/10, G01N 33/68, C12Q 1/68, C07K 16/40, A61K 39/385, 48/00, A61P 35/00
- (21) International Application Number:

PCT/GB2005/001030

- (22) International Filing Date: 17 March 2005 (17.03.2005)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0406054.7

17 March 2004 (17.03.2004) GB

- (71) Applicant (for all designated States except US): THE NOTTINGHAM TRENT UNIVERSITY [GB/GB]; Clifton Lane, Nottingham NG11 8NS (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): REES, Robert, Charles [GB/GB]; The Nottingham Trent University, Clifton Lane, Nottingham NG11 8NS (GB). MCARDLE, Stephanie, Eugenie, Brigitte [FR/GB]; 60 Coronation Street, Swadlincote, Derbyshire DE11 0QB (GB). PARKINSON, Richard, John [GB/GB]; 8 Whittingham Road, Nottingham NG3 6BL (GB).
- (74) Agent: ELSY, David; Withers & Rogers LLP, Goldings House, 2 Hays Lane, London SE1 2HW (GB).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROSTATIC ACID PHOSPHATASE ANTIGENS

(57) Abstract: The invention relates to peptides from Prostatic Acid Phosphatase (PAP), especially those identified as PAP.135 and PAP.161. The nucleic acid molecules encoding the peptides, antibodies against the peptides, and the use of such peptides, nucleic acids and antibodies in immunotherapy, vaccines and assays are also included in the scope of the invention.